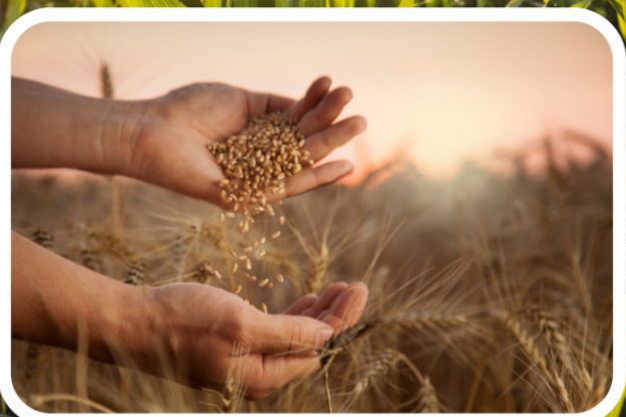




**ASSOCIATION OF  
INDIAN ORGANIC INDUSTRY**

# NEWSLETTER

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## From CEO's Desk



Dear Colleagues and Partners!

Greetings from the Association of Indian Organic Industry!

NPOP will be completing 23 years of its inception in November this year. Initially it was notified for exports under DGFT Act. Later in 2018, it was also promulgated under the Food Safety and Standards Act for the domestic market. During this journey India was the first country to implement Grower Groups certification and Traceability System for organic certification. This imitative of India was well appreciated by all our trading partners and later other countries followed by introducing it in their national standards.

The past few years have shown a dynamic trend in the international markets converting organic process certification system in to de facto product certification. Compliance to such requirements may add more credibility to organic products but at the same time making it more challenging at every stage of the certification process. In this special edition of the AIOI Newsletter, there are important topics of your interest regarding the need-based risk assessments of grower groups and required changes in the regulatory enforcement to make it more compatible for negotiations in organic trade. In our earlier editions of our Newsletters in 2023, this time we have again covered articles on organic millets and some Indian recipes for different categories of consumers.

I hope you will enjoy reading this edition with many other interesting features, namely, the role of eco / organic farming in the revival of rivers. We look forward to your continued patronage and feedback so that we can continuously add value to our work.

With Best Wishes  
AIOI Family



## USE OF THIRD PARTY BODIES IN REGULATIONS – LESSONS LEARNT



**\*Anil Jauhri**

There has been a global trend to utilize professional, third-party agencies to administer regulations as regulators worldwide struggle with globalization, resources and at times expertise.

The use of independent laboratories is quite established in regulations globally – the use of third-party inspection/audit and certification has also gained currency with the European Commission leading the way using what are called ‘notified bodies’. Inevitably, the global trend has been adopted in India also and growing number of regulators are relying on third party agencies.

There are a number of regulators in India who rely on third party conformity assessment bodies – laboratories, inspection bodies and certification bodies – like the Agricultural and Processed Food Products Export Development Authority (APEDA) Food Safety and Standards Authority of India (FSSAI), Petroleum and Natural Gas Regulatory Board (PNGRB), Central Drugs Standard Control Organization (CDSCO), Bureau of Energy Efficiency (BEE) to name a few.

The quality control orders being issued under the BIS Act by various line Ministries designating BIS as the sole certification body are also examples of use of third-party agencies – BIS as certification body and BIS-recognized labs.

The system of third-party certification under NPOP has lately been under stress due to the recent developments in EU and USDA-NOP. It has been under stress even in the voluntary market with a US based Accreditation Body (AB) cancelling accreditation of several certification bodies in last 6 months or so, and suspension of accreditations of well-known certification bodies by foreign accreditation bodies for voluntary schemes like Forest Stewardship Council for forest produce, Global Organic Textile Standard and Textile Exchange.

The experience with use of third-party bodies by regulators has given several lessons for a robust regulatory regime as follows:

1. **Multiple accreditation bodies** - When it comes to product regulation, laboratory testing is critical to regulation and use of labs accredited as per ISO 17025 ensures not only competence of labs but also international acceptance of our products through the mutual recognition arrangement of the international body, International Laboratory Accreditation Cooperation (ILAC).



India for a long time had a single national accreditation body, National Accreditation Board for Testing and Calibration Laboratories (NABL), but in last one year two more private lab accreditation bodies have joined the rank with Asia Pacific accreditation Cooperation and ILAC MRAs – Quality & Accreditation Institute (QAI) and the Federation for Development of Accreditation Services (FDAS).

This has complicated the scenario and whereas regulators merrily prescribed NABL accreditation in the past, they now face a question if they should accept the other two accreditation bodies too.

Given the above scenario that in lab accreditation, there is a need for thinking on the subject to have a cohesive approach in the govt in the absence of which individual ministries/regulators will take their own decisions and may take varying decisions which may have impact not only on domestic regulatory regime but also negotiation of FTAs by Department of Commerce.

The first question to ask is – **should government and regulators continue to rely on national ABs as before or should they open their doors to the private ABs in India who secure ILAC MRA signatory status?**

This can be argued both ways – that since government has set up national ABs, it should rely on them for its purposes or that if Indian ABs go on to secure international recognition, they should be acknowledged and utilised as much as national ABs.

A related question would be – **should govt/regulators recognize accreditation of Indian conformity assessment bodies like labs by foreign ABs operating in India** – it may be added that a number of ABs do operate in India since late 1980s – from USA, UK, Germany, Australia, Korea, Dubai, Egypt to name a few.

In case the answer to first question is: no – India should continue to rely on national ABs in its regulatory regimes, then it needs to be documented and conveyed to all Ministries so that there is uniformity of approach.

In case the answer is yes – then there are couple of other issues to be tackled.

Each ministry/regulator would have to devise a system of approving ABs – in some countries like USA, such a system does exist for example under USFDA for food and Federal Communications Commission (FCC) – its natural since USA has been a multi private AB economy for years.

FSSAI had already gone ahead and announced its system for recognizing other Abs in December 2022 but has since been put on hold. However, each ministry or regulator devising its own system may lead to variable systems and pose a problem for ABs and conformity assessment bodies. The Ministries/regulators may not have sufficient knowledge to devise such a system, e.g., even accredited manufacturers' labs cannot be denotified stating conflict of interest. Therefore, **it is necessary that a system is devised by an expert group**



**centrally and then shared with all ministries/regulators to implement.**

Secondly, the international standard applicable to ABs, **ISO 17011**, for obvious reasons is **quite flexible and provides freedom to ABs to design their accreditation systems keeping in view the local context**. For example, ABs can have accreditation validity for any period up to 5 years and even without expiry subject to reassessment every 5 years or have onsite assessment at least once in 2 years. In a multi-AB scenario, it is very likely that ABs, under competitive pressure, would choose the most liberal options rather than those which are suitable in Indian context. As it is, the risk of unethical testing/ inspection/ certification needs to be avoided. In case of regulatory regimes, the risk becomes even higher. Without considering risk even now liberal provisions of surveillance are being used. Some of the provisions of ISO 17011 will need to be more prescriptive keeping regulators' interest in view. **The expert group suggested above could also recommend measures in this regard.**

**2. Role clarity and separation** – The troubles APEDA has faced has brought to fore the need for role clarity and risks of combining all roles into one. In case of organic certification, APEDA is the regulator, accreditation body and implementation agency for the NPOP. While organic produce has faced rejections abroad on grounds of contamination, who is responsible for domestic produce and exercises market surveillance – APEDA or FSSAI? There has been no indication of any domestic follow up action after rejections abroad.

The issue of accreditation of certification bodies by APEDA when there is a national accreditation body, National Accreditation Board for Certification Bodies (NABCB) available, also needs a review. By combining these roles, APEDA deprives itself of the supervisory role and a layer of oversight that regulators and voluntary scheme owners play when they rely on accreditation bodies.

**Regulators need to write clear rules for conformity assessment bodies and even accreditation bodies to ensure uniformity among them.**

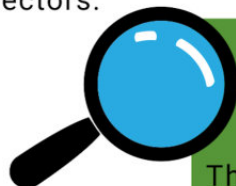
**3. Importance of conformity assessment schemes** – When a regulator uses multiple third-party bodies, it needs to develop a scheme for uniform implementation across labs or certification bodies or inspection agencies - the process of testing, inspection or certification, the competence of personnel to be used, the technical areas which may need different competences and observation on site when accrediting such bodies etc. This requires multiple competences which are usually not available inhouse in any single organization. It is necessary that each regulator has an expert group to devise such schemes as per international norms for a robust regime and easier acceptance by foreign regulators. How many regulators realize that lab accreditation covers accreditation of not only independent labs but those of manufacturers' inhouse labs as well as manufacturer linked labs even if separate legal entities. The other regulators may be having the same



issue. What organic troubles indicate is that the NPOP needs to strengthen its system for tackling the risks present in the supply chain and not leave too much discretion to certification bodies to adopt risk-based testing which they are unable to under competitive pressures. **These issues need to be addressed in the certification or testing schemes framed by regulators which need to be developed and reviewed by expert groups.**

**4. Absence of central authority** – The issues of standards, technical regulations and conformity assessment have become quite complex especially with use of third-party bodies and it is inconceivable that every Ministry or regulator would have sufficient competence to tackle these issues. There is a need for a central authority on the subject which can enunciate generic policies which apply across all ministries or regulators e.g., use of accreditation or issues of conflict of interest or laying down rules for multiple accreditation bodies etc. The Department of Commerce has been de facto playing that role in last few years and even brought out a Indian National Strategy for Standardization (INSS) in 2018. However, this needs to be identified as an issue and formalized at the highest levels so that any ministry or regulator can take guidance on issues related to standards and technical regulations and follow centrally laid down policies.

To conclude, India needs to review its framework for standards and technical regulations in the blight of latest global and national developments, the experiences gained and especially the set backs faced so that we can put in place globally compatible robust regulatory regimes in different sectors.



#### **FSSAI directs labs to strengthen testing infrastructure for organic products**

The Food Safety and Standards Authority of India (FSSAI) is looking at ramping up testing infrastructure for organic products in the country. In an order, the FSSAI has directed all notified laboratories to take steps to strengthen their testing infrastructure for the same. It has also asked them to get recognition from the Agricultural and Processed Food Products Export Development Authority (APEDA) for testing organic products.

This comes after the Centre has decided to promote organic products in the country.

<https://www.thehindubusinessline.com/economy/fssai-directs-labs-to-strengthen-testing-infrastructure-for-organic-products/article66997973.ece>





## NEED FOR A MORE HARMONIZED MODEL OF RISK ASSESSMENT FOR ASSURING INTEGRITY OF ORGANIC PRODUCTS



**\*Dr P V S M Gouri**

The success of organic agriculture is built on trust of consumers by recognising the organic labels and their willingness to recognise additional value for paying a premium to such products. The assurance is built on certification.

Certification of organic products is a process certification. In fact, organic certification system is a quality assurance system intended to assure quality, prevent fraud and promote commerce, based on a set of standards and ethics. The aim is to assure quality and to ensure protection of consumers. The process involves many actors, namely, producers, processors, traders, manufactures and retailers in the supply chain.

There are numerous types of risks that may arise at production, processing, manufacturing in the value chain, right from the raw materials stage to the products in hand of the consumer. These are specific to organic grower groups production as there are three varieties of models operating presently in the country for compliance to NPOP.

- Third party service providers selected under the Government schemes to promote organic farming in the country. The service providers who are supposed to teach / train the farmers on the requirements of ICS so that after the initial years of operations, the farmers are empowered to sustain their activities on their own and graduate as FPOs.
- The second model prevailing is the one organised by traders/NGOs who develop the grower groups. They provide inputs and training to the farmers, manage the ICS through their staff. This model of farmer groups are able to sustain the ICS development to some extent on their own but such projects are few in number.
- The third model is the PGS module run by the Regional Councils (RCs) under NCOF-MOA scheme. The RCs register the farmers under the National portal of NCOF, teach them NPOP organic standards of production requirements and facilitate the PGS certification. The farmers under PGS can individually also sell his products to the consumer directly or collectively the under PGS certification. The RCs are private companies, Certification Bodies (CBs) or state Govt bodies.





Under the present circumstances of different types of operations of grower groups, the compliance to organic production requirements needs to be under strict surveillance by the regulators. The supply chains differ from each other - some are short (PGS) while others are longer. Therefore, risk of non-compliance prevails. Risks can never be completely eliminated in any system nor can they be measured. Regulators, CBs and operators have to deal with uncertainty. One cannot know what one does not know. What we know is that there would be repercussions of risks. However, we also need to know when and how it occurs. In the organic production process, these risks can be evaluated at 3 different levels, i.e., Operators, Inspectors and CBs. Efforts to reduce risks will achieve maximum possible benefits.

To mitigate the risks in organic certification under the NPOP Regulations (third party certification), the CBs are required to carry out the risk assessment annually and at all levels in the different models of operations. Presently, there is no uniformity in the assessment of risks by CBs. The risks in a model cannot be the same. It might be at a lower level or at a higher level. Therefore, policy and procedure of risk assessment should be part of SOP of any CB in their certification programme.

Various tools may be applied for risk assessment of certification programmes:

#### **1. Root cause analysis**

Analyze the causes of failure, inefficiencies, which can reasonably be identified followed by procedures for preventing recurrence. CBs can control it with effective procedures. The corrective actions and effectiveness of verification could be carried out for any non-compliances observed.

#### **2. Risk Assessment**

Design Risk Assessment Framework (RAF) for all different operations under certification. The RAF will help any CB identify potential hazards and any business assets put at risk by these hazards, as well as potential fallout if these risks come to fruition.

#### **3. Strengthen the audit process**

Risk-based inspections of operators are required at all levels to prevent the occurrence of incidents.

#### **4. CB should be independent, strict, righteous and alert**

CBs should not interpret the standards but work within the framework of the National Programme for Organic Production (NPOP).

The same principle applies to the assessors of the accredited certification programmes. In the present scenario there is a need to revisit the RAF at the level of CBs and the regulators as well as at all levels of operations.

There is a need to update the operating procedures of inspectors of the CBs as well as assessors from the lessons learned on an ongoing basis, exchange views with sector specific experts, reach out to different stakeholders. This will bring in uniformity in operations at all levels to mitigate the risks for maintaining the integrity of the organic products.



## TWO DECADES OF ORGANIC FARMING IN INDIA



**\*Dr. A K Yadav**

### **Journey so far**

Who-so-ever writes the history of organic farming, cannot forget the contribution of Indian and Chinese farmers. Indian farmers are 40 century organic farmers and the entire agriculture till late sixties was essentially organic. Modern standards and certification system based organic farming started only recently and India is fast catching up with other front runners. With its emergence since early 2000 organic farming was treated as umbrella concept for all forms of non-chemical farming including natural farming, agro-ecological farming, permaculture, rishi krishi etc and all these were being looked like variants of organic farming and were also certified as organic. In terms of area India now has more than 6 million ha registered under two organic certification systems (NPOP and PGS-India) and is among the top four countries in the world in terms of cultivated area and probably the front runner in terms of total arable land under crops.

### **Diversification of non-chemical farming system**

India, being the mother of non-chemical farming systems, had innumerable variants under different names with different principles, different management practices and different inputs. But one thing which was common in all these systems was integration of livestock, biodiversity, on-farm biomass recycling, strengthening of natural nutrient cycles and major focus on soil health build up. While some systems were input specific, open to external inputs, some were relying only on on-farm resource management and plant and cattle based specific input formulations.

Encouraged with the practitioners' experiences now various systems have been standardized and are finding increasing acceptance among farmers. Natural farming being promoted as a step ahead of organic farming is one such system which promises freedom to farmers from external inputs, reduces cost of cultivation with comparable productivity. Interestingly these systems are not certification centric and targets trust based local and short distance marketing.





### **Organic agriculture and certification**

As the modern organic agriculture started with standards and certification systems, over the years, certification has become the companion of organic farming. Ironically, traditional farmers practicing organic farming and successfully demonstrating the potential of non-chemical diversified cropping system-based agriculture but not certified are not being considered as organic. Certification systems with multiple layers of compliances, exhaustive documentation and increasing costs have gone beyond the reach of farmers and paved the way for entry of certification facilitators, generally referred to as mandators in organic agriculture. While we integrate new strategies for promotion of non-chemical farming systems, we need to ensure that the movement continues to be farmer centric rather than mandator, industry and market centric and promise profitable returns to the primary producer.

### **Shifting trends from process to lab test-based product certification**

World over organic certification is process verification driven and does not rely on laboratory tests for authenticity verification. But increasing trend of getting samples tested for pesticide residues, often multiple times is not only adding to the cost but also eroding the spirit of process-based system and gradually pushing the systems from process to product certification.

### **Principles of organic farming**

Four fundamental principles of organic farming related to health, care, ecology and fairness are losing relevance. These are being considered in standards development but are getting diluted or ignored while implementing them on the field. Current systems, based on bureaucratic assessment of standard compliance (rather than ensuring integration of principles) is proving counter-productive. We need to introspect and bring in mid-course correction not only in standards development, compliance assessment but also in ensuring farmers' participation in the quality assurance management.

### **Government policy and programme**

The Government of India has been promoting organic farming through two dedicated schemes namely Paramparagat Krishi Vikas Yojna (PKVY) and Mission Organic Value Chain Development for North-Eastern Region (MOVCDNER) using cluster approach under value chain mode. Farmers' institutions in the form of Farmer Producer Organizations (FPOs) were also integrated with these schemes to make the farmers as partners in the value chain. Both these schemes have significantly contributed to the growth of organic farming in the country in terms of area addition and awareness creation among producers.

Encouraged with the success of natural farming in some states and large numbers of practicing natural farmers, Ministry of Agriculture, Govt. of India is in the process to promote it in mission mode through National Mission on Natural Farming (NMNF) during the current financial year. Under NMNF, the Govt. is targeting to develop 15000 model clusters across the country. These clusters are proposed to be developed under the supervision of a practicing natural farmer.



### **Consumer awareness - a missing link**

With significant efforts of industry, Government, and civil society organizations, although, organic farming has established its importance, need and relevance, but a similar enthusiasm from consumers is not visible. There is a need for future strategies to focus more on consumer awareness. World over fresh fruits, vegetables and dairy products are the most preferred commodities under organic but are poorly represented in Indian organic growth story.

### **Need for a paradigm shift in promotion strategies**

So far, Government programme were farmer centric and aimed at increasing the area under organic farming and ensuring certification facilitation to farmers. These programmes also provided for incentivization of farmers for adoption of organic farming and for on-farm and off-farm inputs. These programmes were also supporting the organic farmers for development of post-harvest value chain and market linkages and have significantly contributed to increase in area with many success stories of end-to-end value chain in North Eastern Region, Maharashtra, Karnataka, Chhattisgarh and other some other states. Connecting to consumers and attracting the consumers with the benefit of organic and natural systems is yet to be focal point in the movement.

Future strategies need to focus on consumer awareness to create demand. Increased demand will create the pull factor to bring in more and more producers. Consumer awareness needs to be taken up as a collective effort by industry, civil society organizations and corporates through CSR funding.

### **Future Prospects**

If the past growth trends continue, then organic sector is likely to grow much faster than the average world trends. India with its diversified agro-climate and biodiversity of crops can capture the world market for raw commodities, ingredients and semi-processed products. Exports are likely to touch new heights in next 5-7 years and area is expected to increase from current the 6.0 million ha to more than 10 million ha by 2030. But collective efforts are needed to bring in more area with focus on domestic and local markets and keeping farmers in the centre as partners of value chain and consumers. Time has come to collaborate and integrate these in our future journey to a world free from chemicals. It is the collective responsibility of all stakeholders to contribute and ensure the nation with safe and healthy food along with safe and healthy soils and environment.

### **Sresta Natural Bioproducts to launch organic baby food.**

Mr. Raj Seelam, Founder and Managing Director of Sresta Natural Bioproducts talks about the company's plans.

Sresta Natural Bioproducts, one of the earliest organic food products companies in India, is diversifying its product basket by launching baby and children's food, snacks, and frozen foods.

Source: <https://www.thehindubusinessline.com/multimedia/video/sresta-natural-bioproducts-to-launch-organic-baby-food/article67153873.ece>



# GENETICALLY MODIFIED ORGANISMS IN FOOD



\*Anjali Gulati

## Genetically Modified Food

Advancement in Biotechnology and its intervention into Food and Agriculture globally has led to development of genetically modified food products. Genetically modified organisms like plants microorganism, whose DNA has been altered through insertion of foreign genes or genome editing, are widely used in food production.

In genetic modification (or bio-engineering), scientists remove one or more genes from the DNA of another organism like bacteria, plant or animal and insert it into the DNA of a desired plant to alter its DNA. Through this process they create desired traits and characteristics in the target crop. For example, genetic engineers have developed pest resistance and herbicide tolerant crops using this technique. Genetic engineering is radically different from traditional plant breeding, since unlike traditional breeding, it introduces genes from unrelated species of organism into another.

Though list of genetically modified crops allowed for cultivation and/or import varies from country to country, but most used genetically modified crops are Alfalfa, Apples, Canola, Corn (Maize), Cotton, Potatoes, Papaya, Pineapple, Rice Soybeans, Sugar Beets, Wheat, Yellow Squash and Zucchini.

## New Genetic Modification Techniques

More recently developed genetic modification or genetic engineering techniques like synthetic biology, CRISPR-cas9, Zinc Finger Nucleases, RNAi, Gene Splicing etc. enables scientists to edit parts of gene sequences by removing, adding, or altering sections of DNA. The aim is to activate or deactivate targeted genes to produce a desired effect. Crops developed through such methodologies are commonly referred to as gene edited crops.





## Genetically Modified Food Ingredients

Food products contain many ingredients that are derived from genetically modified crops like corn starch, high fructose corn syrup, dextrins derived from corn, soy lecithin, soybean oil, soybean meal, canola oil, corn cellulose, vitamins, and amino acids etc., the list is very long. Just one crop corn can be used to make hundreds of highly processed food ingredients.

Over the past few years, the biotechnology industry and GMO landscape has evolved rapidly. New gene editing techniques are being used to create ingredients that are widely used in the food industry.

The biotechnological intervention in food and agriculture is on a fast track with new gene editing techniques that are easy to use, less expensive, and promising faster turnaround from product development to release. Apart from pest resistance and herbicide tolerance, newer crops are being developed with traits like improved nutritional content, longer shelf life and enhanced tolerance to environmental stress.

## Genetically Modified Crops in India

Introduction of Genetically Modified Crops in India dates to early 2000s when Bt. Cotton, genetically modified to resist insect pest infestation was commercially approved. Though Bt.Cotton, since then has been the only commercially approved genetically modified crops in India, several other crops have been approved by the relevant authorities for purpose of field trials like Bt. Brinjal, Roundup Ready Cotton, Transgenic Mustard Hybrid, Genetically Engineered Potato for resistance to late blight, Insect Pest Resistant Pigeon Pea, Insect Pest Resistant Maize, Genetically Engineered Banana for enhanced nutrition.

Release of genetically modified/engineered crops for field trials poses a threat to non-genetically modified counterparts of these crops and organic certified crops that prohibit the use of genetically modified organism due to risk of cross contamination.

## Risk of Contamination of Non-Genetically Modified and Organic Crops and Food Products

Release of genetically modified crops and foods pose the risk of contamination through commingling. Various chain of custody points of a food production operation and supply chain like production, processing, handling, storage, packaging, conveyance, and transport are potential risk points for entry of GM Crops and Foods.

Considering potential risks of contamination through commingling, it becomes necessary for the Organic and Non-GMO food production operations to include measures like testing, segregation, and traceability.



## Regulations for Genetically Modified Organisms and Labelling of Genetically Modified Foods

Regulating the use Genetically Modified Organisms and labelling Genetically Modified Foods are of utmost importance for protection our food supply chain.

Global GMO Regulations and Voluntary Non-GMO Certification and Verification standards and programs like Non-GMO Project Standard, FoodChain ID Non-GMO Standard and Proterra Standard use testing of food products as the primary method to limit GM contamination in verified/certified food products. The allowable limits, also known as the threshold limit of GM contamination vary across global standards and regulations based on the nature of products. In the EU and US, threshold of GM contamination for human food products is <0.9%, the Non-GMO Project Standard in the US limits GM contamination of animal feed at <5%, at <1.5% for textile and packaging products and <0.25% for planting seeds. In some geographies the limit can be even stricter at <0.1%. FSSAI in India has also proposed draft regulations limiting the genetic contamination in food products to 1%.

Global organic regulations like National Organic Program (NOP) of United States Department of Agriculture, National Program for Organic Production (NPOP) of Government of India, EU organic regulations and all other organic regulations explicitly prohibit the use of GMOs in the organic production and handling.

### Conclusion

Testing of crops and food products for GM contamination and adequate segregation of such food products that meet the testing action thresholds is important to protect and preserve the integrity and identity of Non-GMO and Organic food products. As we know it is easier said than done, getting certified to Non-GMO Standards, will not only help food production companies to incorporate testing, segregation and identity preservation protocols that ensure avoiding cross contamination but also label and market their products as Non-GMO.



*\*BT Cotton, the only non-edible GMO Crop approved in India for conventional production.*



## MILLETS & ITS ORGANIC CONVERGENCE; ON THE EVE OF INTERNATIONAL YEAR OF MILLETS, 2023



**\*Sambit Panigrahi**

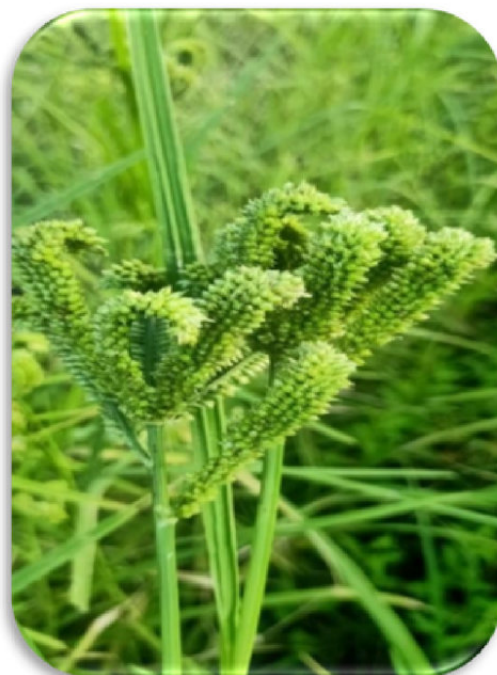
For millions of people in the semi- arid tropics of Asia and Africa, millets are an important staple food item. As millets are climate- resilient crops and sustainable income sources for farmers, they provide economic security. Millets are resilient to extreme climatic stress including drought and flood and can be considered ideal crops of the 21st century where we are facing depleting natural resources and climate change.

Millets are also known as the next-generation crops. They are adaptive to a wide range of environmental conditions, have low nutrient input requirements, minimum vulnerability to ecological stresses, less reliance on synthetic fertilizers, low water requirement, better growth, and productivity.

Millets are often referred to as 'small-seeded grasses'. They are of nine varieties: Sorghum (Jowar), Pearl millet (Bajra), Finger millet (Mandia/Ragi), Little millet (Kutki), Kodo millet (Kodon), Foxtail millet (Kangana/ Kakum), Barnyard millet (Sanwa/Jhangaon), Proso millet (Barre) and Browntop Millet. In most developing countries, including India almost all kinds of millets are consumed by humans.

### Millets in India

India is the largest producer and second largest exporter of millets globally and accounts for about 80% of the global production of millet. India has more than 34% the semi-arid lands (of the total area) suitable for harvesting millets. In terms of hectares and total production, in India, millets are grown on about 17 million hectares with an annual production of 18 million tons and contribute 10% to the country's foodgrain basket. In India, India Finger millet (Ragi), Sorghum (Jowar), Little millet (Kutki), Pearl millet (Bajara), and Proso millet (Barre) are produced in 21 States including Rajasthan, Karnataka, Andhra Pradesh, Tamil Nadu, Uttar Pradesh, Gujarat, Madhya Pradesh, Haryana and Odisha.





### Policy Initiatives on Millets

To promote the production and consumption of millets, the Government of India (GoI) has made certain national-level policies. In 2012, an Initiative for Nutritional Security through Intensive Millet Promotion (INSIMP) was launched to boost millet production and value-addition through processing. Later, it merged with National Food Security Mission (NFSM) and spread across 182 districts. In 2017, NITI Aayog released the National Nutrition Strategy (NNS) for 'Nourishing India' and recommended that the Ministry of Agriculture and Farmer Welfare (MoA&FW) strengthen cereal productivity and production diversity – including the production of 'coarse' cereals such as millets. In 2018, millets were officially declared as 'Nutri-Cereals.' GoI also launched the sub-mission on Nutricereals under NFSM with an investment of Rs 300 Crores for 2018-19. The year 2018 was India's National Year of Millets to boost the production of the nutrient-rich millets and boost the agriculture industry involved in it. Sponsored by India and supported by more than 70 countries, the U.N. General Assembly adopted a resolution declaring 2023 as the International Year of Millets to promote supply and demand of millets and to promote international recognition of millets.

### Promoting millets production under MSME Sector

In 2020, the Ministry of Food Processing Industries (MoFPI) launched a scheme called PM Formalization of Micro Food Enterprises (PM FME). It provides technical, financial, and business support for the upgradation of existing micro food processing enterprises through formalizing and handholding. The scheme has adopted the One District One Product (ODOP) approach. 17 districts from 11 states were selected for millet-based products. To encourage millet consumption, GoI has included millets as a 'coarse cereal' under the Food Security Bill as a policy intervention. Besides, many State Governments like Odisha has achieved remarkable progress through its flagship millet programme, Odisha Millet Mission (OMM).

### Organic Millet Certification

The market for organic products increased manifold in the past few years. Enhanced health consciousness in recent years has seen further upsurge post the Covid-19 pandemic, has fueled growth in sustainable and regenerative organic agriculture. Most millets can be grown on low fertility soils – acidic, saline and sandy and do not require chemical fertilizers. This is ideal for organic farming with some modification.

However, to make it attractive to farmers, fair pricing for organic produce must be ensured. A way forward to achieve this is to ensure that farmers are able to realize higher price attributed to organic food products with a user-friendly certification system.





A policy intervention may prove vital towards achieving the new heights;

- **Financial assistance for certification:** Given the rising demand for organic produce- especially millets, it is imperative that the State and Central Governments provide financial assistance for adoption, local infrastructure and certification to cover the cost of organic convergence.
- **Integrated market support:** The local producers, mostly smallholders, tribal and women, are often far from the urban markets where the demand currently rests. They often lack adequate knowledge and access to digital marketing. Special efforts are, therefore, required to integrate them with organized markets to access private online aggregators and sellers.
- **Create awareness and brand building:** Creating awareness among farmers and FPO about organic certification should be done at the ground level. Further, to incentivize the farmers and to create a niche market, the Government - both at the State and Centre levels should strengthen their brand building to promote certified organic millets in the domestic and international markets.

An honest effort is required to transform the millet field to ORGANIC to serve the consumers with a nutritious, safe and organic platter.





## "SPICING UP SUSTAINABILITY: THE ORGANIC NAGA CHILLIES - A PROMISING CROP FOR FARMERS IN NAGALAND"



\* Narayana Upadhyaya

### ➤➤➤ INTRODUCTION

In the verdant hills of Nagaland, a remarkable agricultural initiative is taking root, one that not only tantalizes taste buds but also nurtures the environment and empowers local communities. Organic Naga chillies (*Capsicum chinense*), grown under the watchful eye of the NPOP certification program and with the support of the Department of Horticulture and Agriculture, Nagaland, are paving the way for a more sustainable and inclusive future. This article explores the numerous benefits that organic Naga chilli cultivation brings to the environment, farmers, processors, traders, and consumers alike. Naga chillies (Naga mircha) received Geographical Indication (GI) tag in 2008. Naga chilly is a member of the Solanaceae family's genus *Capsicum*. It is small and turns into a bright red color as it matures. It contains high pungency degrees and Capsaicinoids.

### ➤➤➤ ENVIRONMENTAL BENEFITS:

Organic farming practices employed in Naga chilli cultivation eliminate the use of synthetic pesticides and fertilizers, reducing soil and water pollution. By promoting biodiversity, these practices enhance natural pest control and preserve ecosystem health. Additionally, organic farming conserves the topsoil and water, reduces soil erosion in hilly terrains, and mitigates climate change impacts by reducing greenhouse gas emissions. This makes organic Naga chilli cultivation a vital ally in the fight against environmental degradation.

### ➤➤➤ EMPOWERING FARMERS:

The cultivation of organic Naga chillies empowers local farmers, enabling them to break free from the cycle of dependency on chemical inputs. By adopting organic methods, farmers reduce production costs and gain access to premium markets that appreciate their commitment to sustainability. Moreover, organic farming practices promote soil fertility, leading to long-term productivity and resilience, and fostering food security in the region.





## ➤➤➤ BOOSTING PROCESSORS AND TRADERS:

The organic Naga chillies project not only benefits farmers but also processors and traders. By adhering to organic standards, processors can confidently market their products to environmentally conscious consumers who seek healthier and ethically produced food options. Traders, in turn, can tap into a growing market demand for organic products, expanding their business opportunities while supporting sustainable practices.



Dried Chillies



Naga chillies farmer with the inspector

## ➤➤➤ DELIGHTING CONSUMERS:

For consumers, organic Naga chillies are a culinary delight. Known for their fiery heat and distinctive flavour, these chillies add a unique zest to a variety of dishes. Additionally, consumers can enjoy these spicy sensations with the peace of mind that they are supporting sustainable agricultural practices and promoting the well-being of local farming communities.

## ➤➤➤ CONCLUSION:

The cultivation of organic Naga chillies holds great promise for farmers in Nagaland, aligning with sustainable agriculture and NPOP certification. This initiative creates a win-win situation for the environment, farmers, processors, traders, and consumers. By cultivating these fiery delights using organic practices, Nagaland is not only preserving its biodiversity and natural resources but also empowering its farmers and offering a tantalizing taste experience to consumers. As this initiative continues to grow, it holds the potential to inspire other regions to embrace organic farming, fostering a more sustainable and resilient future for all.



Naga chillies processed product



## FOURTH BATCH PASSOUT (JUNE-SEPT 2023) BATCH READY TO SERVE THE INDUSTRY

With the aim of promoting Atmanirbhar Bharat, entrepreneurship and empowerment for employment in organic Industry, AIOI, in alliance with Professor Jayashankar Telangana State Agricultural University (PJTSAU) initiated a 40 hours online certificate course in Organic Farming in October 2021. The subject of the course was skills and entrepreneurship development in the Organic Industry. It is attended by students, entrepreneurs, counsellors, and freelancers. As per the feedback received from the industry and aspiring entrepreneurs who attended the course has greatly benefited the graduates and postgraduates in their career as it was market oriented in agriculture, food engineering, environment sciences and applied sciences.

Three batches have been rolled out with the individuals ready to serve the organic industry. Fourth batch commenced in June 2023 and is currently being attended by 32 participants. The programme is expected to wind up by September 2023.

The next batch (5th batch) is expected to commence from January, 2024.



**From Left to right:**

**1st Row:** Ajay Kumar, Akhila Azam, Amol Dhawan, Animesh Mohanty, Baijnath Yadav, Meera Chandrasekharan, Sunil Verma, Shubham Bhardwaj, Gaurav Pathania, Jaya Pradha

**2nd Row:** Bodanam Rakesh, Dr. M. Vijaya Jyothi, Rasheed Kadapatti, Ritu Anjali, Ashraf Kasala, Versha Devi, Nageen Chander, Harendra Singh, Sushma Pandey, Mallikarjun C J

**3rd Row:** Shrikesh Chaurasia, Vineeth Raj, Wasim Atwani, Rakshith Gowda P, Supriya Semwal, Deepu Kumar, Manisha Singh, Gangadhar Ghavane, Shahista Parveen, Dolly



## TRAINING TO STATE GOVERNMENT BODY OFFICIALS OF ODHISHA STATE ORGANIC CERTIFICATION AGENCY (OSOCA) & CHATTISGARH CERTIFICATION SOCIETY INDIA FOR FORESTRY & AGRICULTURE (CGCERT)

Quality Manager/Inspection Manager/Assessor/Organic Inspector of **Odisha State Organic Certification Agency** underwent training from 17th to 22nd July, 2023, at AIOI New Delhi office.

They successfully completed 40 hours AIOI Training on organic certification under NPOP covering recent developments in EU, US & NPOP, Risk Assessment, Prevention of risks, Aquaculture, Apiculture and wild harvest certification.

Quality Manager/Field inspectors/Tracenet incharge of **Chattisgarh certification society India for Forestry & Agriculture (CGCERT)** underwent training from 7th to 11th August, 2023, at AIOI New Delhi office.

They successfully completed 40 hours AIOI Training on organic certification under NPOP covering Crop Production, Mushroom production, Wild collection, Certification requirements of Grower groups, Processing, Handling, Trading, Risk assessment, Root Cause analysis, Sampling, Testing, MRLs, Traceability and New EU regulations.





## TRAINING EXPERIENCE OF STATE GOV. CERTIFICATION BODIES

WHAT  
THEY  
HAVE  
TO  
SAY!!

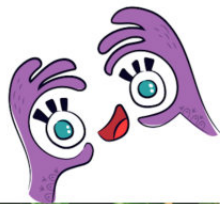


Inspection Head,  
OSOCA



Officials of Orissa State Organic Certification Agency (OSOCA) attended the Quality Management System (QMS) training organized by AIOI in two phases. The training covered the operational structure of NPOP, EU standards, processing & handling, certification, group certification, challenges in group certification, input evaluation methods, risk assessment, wild harvest certification. The training also included organic livestock apiculture and aquaculture.

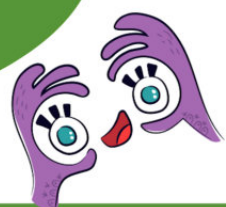
In brief, here is what "The case study approach provided clarity and enhanced our knowledge. Team OSOCA has come out as a winner with a boost to our confidence for handling the ground situation in a more professional way."



Quality Manager,  
CGCERT

Chhattisgarh Certification Society India for Forestry and Agriculture (CGCERT), an accredited certification body in India provides organic certification services as per NPOP. Recently, their team participated in AIOI training on Quality Management System.

"AIOI provided effective and comprehensive training to promote adherence to the requirements of certification. AIOI delivered high-quality training on content and methods that takes an inclusive approach to strike a balance between theoretical content and certification process", commented the CGCERT staff and termed it useful. They found the training material provided by AIOI very helpful.





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## MILLET RECEIPIES FOR WEIGHT LOSS

Millet holds significant importance for weight loss due to its unique combination of nutritional attributes. Millet is a low-calorie grain with high dietary fiber content, making it an excellent choice for those aiming to shed excess pounds. The fiber in millet helps create a feeling of fullness and satiety, reducing overall calorie intake by curbing hunger and preventing unnecessary snacking. Additionally, its low glycemic index ensures a slow and steady release of energy, stabilizing blood sugar levels, and minimizing cravings. This sustained energy release aids in controlling appetite and promoting better adherence to a weight loss plan.

Millet is packed with essential nutrients that support overall health while losing weight. It is a rich source of vitamins like B-complex vitamins and minerals such as magnesium, phosphorus, and manganese. These nutrients play a crucial role in supporting metabolic processes, maintaining bone health, and optimizing various bodily functions. As weight loss often involves a calorie deficit, ensuring adequate intake of essential nutrients is vital to avoid deficiencies and support overall well-being. Additionally, millet is a gluten free and easy to digest, making it suitable for individuals with gluten sensitivities or digestive issues. Its versatility allows for incorporation into a wide array of dishes, making it a practical and delicious addition to a balanced weight loss diet.

### Millet Vegetable Upma (Barnyard Millet)

#### Ingredients:

- 1 cup barnyard millet.
- 2 cups mixed vegetables (carrots, peas, beans, corn etc.
- 1 small onion, finely chopped.
- 1 green chilli, finely chopped.
- 1 inch piece of ginger, grated
- 1 tablespoon oil
- 1/2 teaspoon mustard seeds
- 1/2 teaspoon cumin seeds
- a few query leaves
- 1/4 teaspoon turmeric powder
- salt to taste
- Fresh coriander leaves for garnish



#### Procedure:

- Rinse the barnyard millet thoroughly and soak it in water for 30 minutes. Drain and set aside.
- In a pressure cooker or pot, heat oil and add mustard seeds and cumin seeds. Let them splutter.
- Add chopped onions, green chili, and grated ginger. Saute until onions turn translucent.
- Add the mixed vegetables, turmeric powder, and salt. Stir well.
- Add soaked barnyard millet and 2 cups of water. Mix everything together.
- Close the lid and pressure cook for 2 whistles (if using a pressure cooker) or cook covered on low heat until the millet is cooked and the water is absorbed.
- Garnish with fresh coriander leaves and serve hot.



## MILLET RECEIPIES FOR WEIGHT LOSS

### Millet & Lentil Salad (Foxtail Millet)

#### >>> Ingredients:

- 1 cup foxtail millet, cooked
- 1/2 cup boiled green lentils
- 1 cucumber, diced
- 1 tomato, diced
- 1/2 red bell pepper, diced
- 1/4 cup chopped fresh parsley or cilantro
- Juice of 1 lemon
- 2 tablespoons olive oil
- Salt and pepper to taste



#### >>> Procedure:

- In a large mixing bowl, combine cooked foxtail millet and boiled green lentils.
- Add diced cucumber, tomato, and red bell pepper to the bowl.
- In a separate small bowl, whisk together lemon juice, olive oil, salt, and pepper to make the dressing.
- Pour the dressing over the millet and lentil mixture and toss well to combine.
- Garnish with chopped parsley or cilantro before serving.



### Millet vegetable khichri (Pearl Millet)

#### >>> Ingredients:

- 1 cup pearl millet (bajra)
- 1/2 cup split yellow moong dal
- 1 carrot, chopped
- 1 potato, diced
- 1 cup chopped spinach or kale
- 1 teaspoon cumin seeds
- 1/2 teaspoon turmeric powder
- 1/2 teaspoon garam masala
- 1 tablespoon ghee or oil
- Salt to taste
- Water as required

#### >>> Procedure:

- Wash pearl millet and moong dal together and soak them in water for 30 minutes. Drain and set aside.
- In a pressure cooker or pot, heat ghee or oil and add cumin seeds. Let them splutter.
- Add chopped carrots, potatoes, and greens. Saute for a few minutes.
- Add soaked pearl millet and moong dal to the pot. Stir well.
- Add turmeric powder, garam masala, and salt. Mix everything together.
- Add enough water (around 3 cups) to cover the ingredients and provide a slightly watery consistency.
- Close the lid and pressure cook for 3 whistles (if using a pressure cooker) or cook covered on low heat until the millet and lentils are cooked and soft.
- Serve hot with a dollop of ghee or a side of yogurt.



# MILLET RECEIPIES FOR WEIGHT LOSS

## Millet Energy Bites (Finger Millet/Ragi)

### Ingredients:

- 1 cup finger millet flour (ragi flour)
- 1/2 cup almond butter or peanut butter
- 1/4 cup honey or maple syrup
- 1/2 cup chopped nuts (almonds, walnuts, etc.)
- 1/4 cup dried fruits (raisins, cranberries, etc.)
- 1/4 teaspoon cinnamon powder
- A pinch of salt



### Procedure:

- In a mixing bowl, combine finger millet flour, almond butter or peanut butter, and honey or maple syrup.
- Add chopped nuts, dried fruits, cinnamon powder, and a pinch of salt to the bowl. Mix everything thoroughly.
- Form small balls or bite-sized shapes from the mixture and place them on a parchment-lined tray.
- Refrigerate the energy bites for about 30 minutes to set.
- Once firm, transfer the energy bites to an airtight container and store them in the refrigerator for up to a week.

## Millet spinach soup (Little millet)

### Ingredients:

- 1 cup little millet
- 1 cup chopped spinach
- 1 small onion, finely chopped
- 2 garlic cloves, minced
- 4 cups vegetable broth or water
- 1 tablespoon olive oil
- Salt and pepper to taste



### Procedure:

- Rinse the little millet thoroughly and set it aside.
- In a large pot, heat olive oil and sauté the chopped onions and minced garlic until they turn golden.
- Add chopped spinach to the pot and cook until it wilts.
- Add the rinsed little millet and vegetable broth or water to the pot.
- Season with salt and pepper as per your taste.
- Bring the soup to a boil, then reduce the heat and let it simmer for about 15-20 minutes or until the millet is cooked and tender.
- Serve hot and enjoy your nutritious millet spinach soup.

These millet recipes are not only delicious but also nutritious and suitable for weight loss. Remember to combine them with a balanced diet and regular exercise for better results. Enjoy your culinary journey with millets!





# Growing a Stronger Tomorrow.

We leverage our role at the center of the world's agricultural supply chain to help improve its overall sustainability. In addition to innovating products and processes that improve our own environmental impact, we partner with farmers, customers, industry and civil society to create a more resilient and sustainable global food system.



## Serving the World

ADM is a leader in global nutrition who unlocks the power of nature to envision, create and combine ingredients and flavors for food and beverages, supplements, animal feed, and more.



## AIOI NEW FAMILY MEMBERS

### Mr. Sanket Mody (Individual Member)

Mr. Sanket Mody is an AIOI/PJTSAU certificate course participant. He has been into his own business. His vision is to promote organic farming and reduce pollution. He has expertise in procurement, certifications, cost-optimization and quality assurance. He offers trusted sourcing services to companies. Along with his fellowmen and friends, they have successfully designed a tractor which solely operates and works on electricity and not on polluting diesel or petrol and named it as "GREEN BULL". This tractor ensures the organic integrity of the farm, increases efficiency, yet functioning like a normal tractor.

### Food Chain ID



Food Chain ID is a leading provider of technology enabled, integrated testing, certification, and technical solutions that enable customers to meet the global food supply chain's safety, integrity, and transparency requirements.

They are a market leader in the US for product and ingredient verification services, having verified more products for "non-GMO" certification. They are recognized as a global leader in GMO testing, non-GMO certification and organic certification.

They offer a broad range service to 38,000+ customers from 100+ countries in the area of testing, certification, training, digital solutions and regulatory.





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Naturally

## OUR VISION

Founded with a vision for healthier, eco-friendly agriculture, Qseal quickly became a trusted partner for thousands of farmers across the nation. Their dedication to organic practices & commitment to quality transformed them into a leading force in India's organic movement, creating a greener and future for all.

**QSEAL AGRITECH  
PVT. LTD.**

## QSEAL - THE SEAL OF QUALITY

We strive to be the one stop solution for everything organic. Our agri-experts are constantly helping farmers in each and every corner of the country to produce the best quality organic produce. Our certified farmers ensure the commitment of traceable farm produce that matches the buyer's expectations. All this is managed by an expert team of officials who are always watching over the back of farmers to ensure and provide timely help, support and assistance for farm inputs, trainings, consultations and many other services to ensure the organic movement stays true from source to plate without any dilution in quality.

### Our Services



#### Production

Expertise on organic production of various commodities in 19+ states across India.



#### Farm Inputs

Ensuring supply of organic field supplies that's compliant with organic guidelines



#### Trainings

We help the farmer be technically sound to grow and take care-of organic produce.



#### Marketing

Organic surplus is provided a retail space in the Indian market via various platforms



**19+ states**

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## UPCOMING EVENTS OF ORGANIC INDUSTRY

### **Biofach India 2023**

**Date:** 06 - 08 September, 2023

**Venue:** India Expo Centre & Mart, Plot No, 23/25, 27/29, Knowledge Park II, Greater Noida

**Website:** <https://biofach-india.com/>

### **ANUFOOD India 2023**

**Date:** 07-09 September, 2023

**Venue:** Mumbai

**Website:** <https://www.anufoodindia.com/>

### **Millets, Organics & Dairy – FPOs Expo-Surat 2023**

**Dates:** 15 – 17 September, 2023

**City:** Surat

**Website:** [https://www.sgpcindia.org/event\\_details/6](https://www.sgpcindia.org/event_details/6)

### **World Food India 2023**

**Dates:** 03 – 05 November, 2023

**City:** New Delhi

**Website:** <https://worldfoodindia.gov.in/>

### **SIAL India 2023**

**Dates:** 07-09 December, 2023

**City:** New Delhi




**Website:** <https://www.sialindia.com/>



**NEWS  
ALERT**

# Co2 Fumigation is now approved for Organic commodities : DPPQ&S\*\*

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**1 CAPSULE =**

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1 LAKH CRORE BACTERIA

1 TRILLION CFU COUNT

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10 LITER LIQUID FORMULATION BIO-FERTILIZER

### FEATURES



- World's 1st Microbial Encapsulated Technology
- Replacement of chemical Fertilizer
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**ORGANIC APPROVED**



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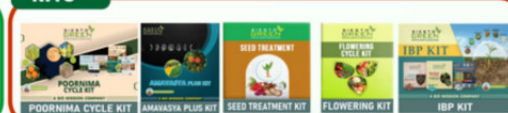


### PRODUCT RANGE

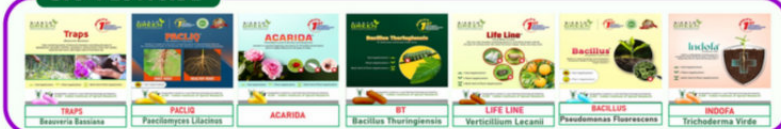
#### BIO-FERTILIZER



#### KITS



#### BIO-PESTICIDE



#### MICRO NUTRIENT / PGP/ PGR







**ASSOCIATION OF  
INDIAN ORGANIC INDUSTRY**

## **Quality Management Training Programme for Accredited Certification Bodies**

### **TOPIC OF INTEREST:**

- Inspection & Certification
- Risk Assessments
- Non-conformities
- Sampling, testing, residues and MRL's in Organic Products
- Corrective Actions Required
- Requirements for EU, NOP & NPOP Certification

"The core principle of an organization is continuous improvement in Quality Management System"

**Mode of Training : Hybrid**

**For more details/registration please contact:**



**Memberservices@aioi.org.in  
Corporate@aioi.org.in**



**91-11-43602167**





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ORGANIC  
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## ENCAPSULATED BIO-FERTILIZERS & BIO-PESTICIDES

### FARMING ISSUES & SOLUTIONS

#### ISSUES BY THE USE OF CONVENTIONAL BIO INPUTS



High input Cost



Application Dosage is High, 5 to 10 kg Powder & 3-5 ltr liquid per acre



Application & Labor Cost is very high



Crop yield is Low as Compare to Chemical Field



Because of High input & application cost, the outcome product cost is high



shelf life is very low as 6 month for powder 12 month for liquid



Low input Cost



Application Dosage is 1 Capsule for 1 acre



Application & Labor Cost is Low



Crop yield is equivalent or High as Compare to Chemical Field



Because of Low input & application cost, the outcome product cost is affordable



shelf life is very High up to 24 months

#### SOLUTION WITH SIESTO GREEN ORGANIC FARMING

### COMPATIBILITY WITH ORGANIC FERTILIZER



### CONVENTIONAL VS BIO-CAPSULE

	CONVENTIONAL		CAPSULE
	POWDER	LIQUID	
CFU Count	5 x 10 <sup>7</sup> /gm.	1x 10 <sup>8</sup> /ml.	1x 10 <sup>12</sup> /gm.
Shelf Life	6 Months	12 months	16 months to 24 months (max)
Formulation	5 crore (Cells/gm.)	10 crore (Cells/ml.)	1 Trillion (Cell/gm.)
Serving Count / Dosage	5-7 kg. (15-20 kg recommended)	2-3 ltr. (8-10 ltr. recommended)	1 Capsule
Cost	Higher Cost	Higher Varies	Lower Cost
Depletion	20% monthly	10% monthly	Below 1% monthly
Cost per Trillion Bacteria	3000 - 5000	4000 - 6000	300 - 350
Field Result	Slow	Slow	Fast
Compatibility with Chemical	Low	Low	High
Carrier per Base Material	90%	90%	1%
Storage Cost	High	Very High	Very Low
Holding Cost	High	Very High	Very Low
Transportation Cost	High	Very High	Very Low

# Reach more people



**AIOI invites you to  
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## Contact Us

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[technical@aioi.org.in](mailto:technical@aioi.org.in)

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## VISIT US

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# PERSONAL INVITATION

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**MILLETS**  
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September 6 - 8, 2023 | India Expo Centre and Mart (IEML), Greater Noida, Delhi-NCR

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### Venue:

India Expo Centre and Mart (IEML),  
Greater Noida, Delhi-NCR

### Timings:

**6.9.2023** - 09:30 a.m. to 05:00 p.m.

**7.9.2023** - 09:30 a.m. to 05:00 p.m.

**8.9.2023** - 10:00 a.m. to 04:00 p.m.

### Get in Touch:

T: +91 11 47168826 / 834

E: Tanya.bhardwaj@nm-india.com

Abhinav.bhardwaj@nm-india.com

[www.biofach-india.com](http://www.biofach-india.com)



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